

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 20382

EXPIRATION DATE: 2017-07-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. <u>GRANTEE</u>: NEXTEV USA, Inc. San Jose, CA

2. PURPOSE AND LIMITATIONS:

- a. This emergency special permit authorizes the transportation of prototype and low production lithium-ion batteries which have not passed the UN-required tests and exceed the allowable weight (35 kg) by cargo aircraft. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180 and the ICAO TI.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.185(a) in that batteries are not tested in accordance with the UN Manual of Tests and Criteria and 49 CFR § 172.101(j) in that batteries are in excess of the net weight in Column 9B are not authorized, except as specified herein.

January 19, 2017

- 5. <u>BASIS</u>: This emergency special permit is based on the application of NEXTEV USA, Inc. dated December 08, 2016, submitted in accordance with § 107.105 and the public proceeding thereon.
- 6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries including lithium ion polymer batteries	9	UN3480	N/A

7. SAFETY CONTROL MEASURES:

a. OPERATIONAL CONTROLS -

- (1) This special permit is valid for the prototype and low production lithium ion batteries identified as NIO Supercar HV battery.
- (2) Each battery having a nominal voltage of 700 V is an assembly of two modules and has an energy rating of 27 kWh.
- (3) The two modules in a battery must be mechanically and electrically disconnected during transport so as to reduce the nominal voltage to 330 V (± 10 V) per module.
- (4) All batteries must be shipped at a state-of charge not more than 25 percent.
- (5) The batteries must be equipped with an effective means of preventing dangerous reverse current flow if a battery contains cells or a series of cells that are connected in parallel.
- (6) Cells, modules and batteries must be protected against short-circuiting.

b. TESTING -

- (1) All lithium ion cells must be of a type that have passed required tests as specified in the "UN Manual of Tests and Criteria, 5th Revised Edition."
- (2) The prototype or low production (annual production of not more than 100) batteries need not be tested in accordance with the "UN Manual of Tests and Criteria, 5th Revised Edition."

c. PACKAGING -

- (1) A battery must be individually packaged in a fully enclosed inner packaging and surrounded by cushioning material that is non-combustible, and non-conductive;
- (2) The battery must be further packaged in a 50D plywood outer packaging that meets Packing Group I performance criteria;
- (3) Only one battery is allowed per package;
- (4) Only four (4) completed battery packages are allowed per shipment under this Special Permit.
- (5) Each package must meet additional requirements in Section 1A of ICAO TI Packing Instructions 965; and
- (6) For cargo aircraft transportation, the net weight of a battery within a package may not exceed 312.5 kg.
- d. MARKING Each package must be marked with the special permit number DOT-SP 20382 in accordance with § 172.301(c).

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

- b. A person who is not a holder of this special permit, but receives a packaging covered by this special permit, may reoffer it for transportation provided no modification or change is made to the packaging and it is offered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the <u>name of the manufacturer and location (city and state) of the facility at which it is manufactured</u> or (2) marked with a <u>registration symbol</u> designated by the Office of Hazardous Materials Special Permits and Approvals <u>for a specific</u> manufacturing facility.
- e. A current copy of this special permit must be maintained at each facility where the packaging is manufactured under this special permit. It must be made available to a DOT representative upon request.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor Vehicle, and Cargo-only aircraft.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle, and aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq:</u>
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)— "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Jord By

Associate Administrator for Hazardous Materials Safety

January 19, 2017

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp app/special permits/spec perm index.htm
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: SH/TG